

The macdonald Journal

AUGUST 1973



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THE MACDONALD LASSIE

THE macdonald JOURNAL

AUGUST 1973

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Journal Jottings

In this issue the article "Mac-
donald's 85,000 Cow Dairy Herd"
is an in depth look at the Dairy
Herd Analysis Service. Most
readers will be familiar with DHAS;
I sincerely hope that all readers,
and in particular dairy farmers,
will take time to read this excellent
report on its past achievements,
present expansion, and future
plans.

Serving the community through
planned extension activities such
as DHAS, though not its primary
function which must be teaching,

has been a long standing tradition
at Macdonald College. The Journal
is but one aspect of that premise;
there are many more obvious
ones in which most disciplines
and Departments on this Campus
participate. An indirect service
which ultimately will be of direct
benefit to the community is the
constant research in the fields
and laboratories and, when you
consider it, what better way
can the community be served
than by teaching its youth who
in turn will serve their community.

Hazel M. Clarke.

Several years ago Georg Borgstrom, a food scientist in the United States, wrote a book titled "The Hungry Planet." In his book Borgstrom warned that the world was facing an imminent shortage of food and energy. The book received much acclaim at the time, but generally the consensus of North American agricultural "experts" was that the book applied to lesser developed countries of the world. Their conclusions were generally that North America could never face a food shortage because of the great efficiency and technological advances that were happening in agriculture. After all, the North American farmer was producing food for 50 or 60 people whereas the peasant farmer in developing countries could produce barely enough for his family.

It is interesting to note how much of what Borgstrom and his colleagues were saying a few years ago is now becoming reality. The advocates of technological advancement in agriculture apparently underestimated the tremendous impact that the natural

environment can have on a nation's food supply. The impact of droughts, floods, and premature snow in the past year provide a dramatic example of how dependent we are upon nature, technological change withstanding.

A similar story has also unfolded regarding the energy situation. For years various scientists have been warning that the world was using up its energy resources at an alarmingly rapid rate. But again, industry kept saying that technology would prevent an energy shortage from happening. But it apparently has happened, temporarily at least, and again it was the influence of the natural environment that has caused the problem. This is something that technological advance, no matter how rapid, can not do much to prevent. An early fall snow storm could do much to reduce the current supply of heating fuel and natural gas in Canada much as it did in the U.S.

All this does not mean that the world is on the brink of disaster. New energy discoveries and changes in consumption patterns of energy and fuel will gradually restore balance to the situation. But there will likely be considerable hardships and high prices before this balance is achieved.

The point to be made is that perhaps we ought to have listened to these scientists as well as we have to the advocates of technological advances, instead of just passing them off as predictors of "gloom and doom." Perhaps it is a good lesson for us that many of their predictions have become reality. This does not mean that we should base our resource decisions solely on these people as we seem to have done with the advocates of technological change. From now on perhaps we can hope that our resource use policy makers will consult both groups instead of only one before making decisions that can so drastically affect the lives of so many people.

Gordon Bachman.

Macdonald's 85,000 Cow Dairy Herd

Seven years ago Macdonald College initiated an ambitious new program designed to combine a computerized management service for dairy farmers with the development of a centralized dairy cattle research centre. The Dairy Herd Analysis Service (DHAS) formed the nucleus of this program.

Through the efforts of Dr. John Moxley and other members of the Animal Science Department, and with the financial assistance of the Macdonald benefactors, DHAS began operation early in 1966 as a programmed dairy cattle management service intended to assist milk producers in making feeding, breeding and general management decisions.

The service began on a modest scale. In July 1966 only 28 herds with a total of 980 dairy cows, all in the Province of Quebec, were enrolled in DHAS. Since that time, DHAS has extended to the Maritime provinces. At present there are approximately 2,400 Quebec and 250 Maritime herds enrolled in the program to provide DHAS with a cow herd numbering more than 85,000 cows. This 85,000 cow dairy herd now provides a unique base for research and development geared to dairy cattle improvement.

The Management Service

The DHAS program is organized around the coordinated activities of four integrated units — the participating dairy farmer, the field staff, the milk analysis laboratory and the computing centre. Interrelationships between these four fundamental units are illustrated in the accompanying figure.

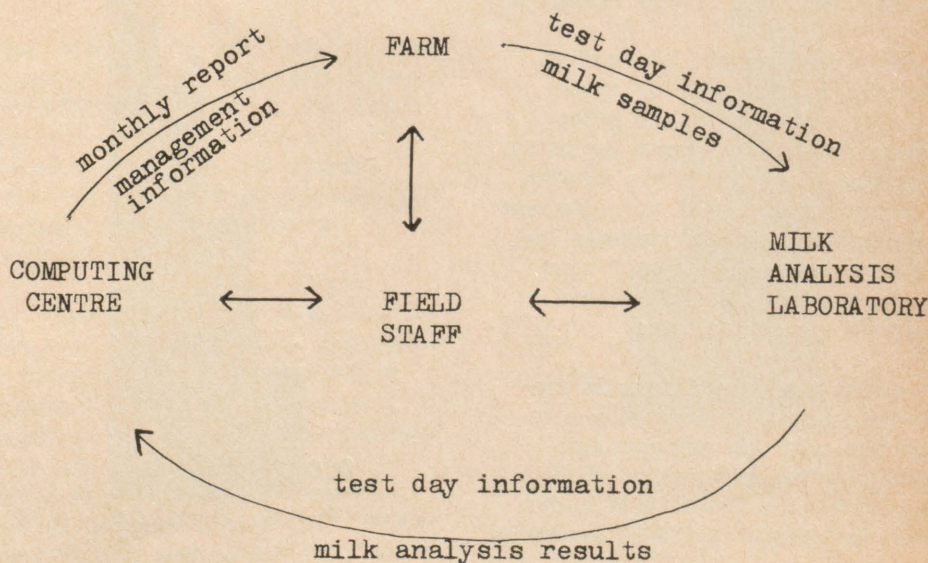
The system begins and ends on the farm. On one day each month the daily milk production and meal consumption of each cow is recorded and individual milk samples are obtained. Any changes in a cow's status, for example, calving, dry or breeding dates, are also recorded to complete the individual cow profile. On a herd basis, the dairyman, with the assistance of the DHAS field supervisor, determines the quantity and quality of his feed (the feed can be chemically analyzed at Macdonald College or provincial government laboratories if necessary) as well as current milk prices and labour inputs required by his dairy operation.

The DHAS fieldman verifies that the information is properly recorded and the test day information along with the milk samples are sent to the milk analysis laboratory at Macdonald College. At the laboratory, the milk samples are electronically evaluated for both fat and

protein content. This information is added to the test day data and relayed to the computing centre where it is punched on data cards to be processed.

Before the dairyman's monthly report is processed, a computerized data edit is performed to verify that the test day information is correct. Edit sheets are produced for each herd and are scrutinized by trained DHAS personnel who correct inaccurate or missing information. The field supervisor routinely receives copies of all edit sheets to prevent future errors.

After the data edit has been approved, the verified test day information is entered into the computer system where it is combined with prior cow and herd information stored in the DHAS data bank. The computer then processes the combined data to produce the dairyman's monthly report. The dairyman usually re-



ceives his monthly report in the mail within 10 days to two weeks from the time his test day information and milk samples were sent in.

The monthly report provides the dairy farmer with both a general and detailed analysis of his dairy operation upon which he can base feeding, breeding and management decisions. Contained in the monthly report are indices indicating the general nutritional status of the herd plus individual feeding recommendations for each cow based on her current energy requirements.

General production levels and trends in herd production are given as well as the monthly and accumulated milk, butter fat and protein production for each cow. Additionally, individual cows are assigned a cow rating which assesses their combined milk and butter fat performance in relation to the rest of the herd. The cow rating provides a convenient guide for selection and culling decisions.

Some of the financial information provided in the monthly report includes estimates of the gross income for each cow and her return over feed costs on both a monthly and cumulative basis. Management information provided includes the reproductive status of each cow and cows that should be bred or dried off are so indicated.

To assist the dairy farmer in the interpretation of his report and to help him with his management decisions, the dairyman is visited monthly by the DHAS field supervisor. Presently, all DHAS fieldmen

are graduates of either an Institute of Agricultural Technology or the Macdonald Diploma Course.

Dairy farmers have responded well to the DHAS management service. Most herds enrolled in DHAS experience a continual increase in herd size, production per cow and net return with each year on test. The accompanying charts illustrate some of this improvement.

Recent Developments

Although DHAS began as an independent venture, the Quebec Department of Agriculture has recently become an active partner in the program and DHAS is now administered as a joint program

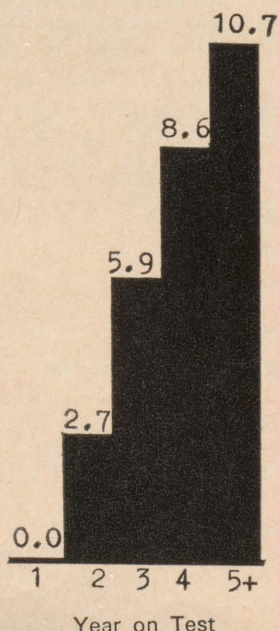
between Macdonald College and the Department of Agriculture. Under the joint agreement, the Department of Agriculture is responsible for promotion of DHAS and through an annual grant provides financial support for the milk analysis and computing operations.

With the cooperation of the Department of Agriculture, a major addition to the DHAS program was made this year. In the past DHAS had been limited to an owner-sampler plan whereby the dairy farmer performed his own milk weighing and sampling. As of June 1, DHAS introduced an official test option under which milk weighing and sampling is performed by a field supervisor. Cows under the official test option are issued official certificates of production with each completed lactation and these certificates may be used for cattle sales. However, the primary purpose for the official option is to provide supervised records for recognized A.I. sire proofs.

The supervised official plan greatly increases the cost of field services. However, the Quebec Department of Agriculture has agreed to cover a portion of the added expenses while the balance is paid for by the dairymen enrolled in the official test option. There has been no increase in cost for the traditional owner-sampler option. It is expected that within a year about 500 dairy herds will enrol on official test.

A second major development at DHAS, which is also intended to make better use of dairy records for sire proving, has been the introduction of the National Identification Program for Grade Cattle (NIP). NIP, developed by the Joint

Percent Improvement in Milk Production Per Cow



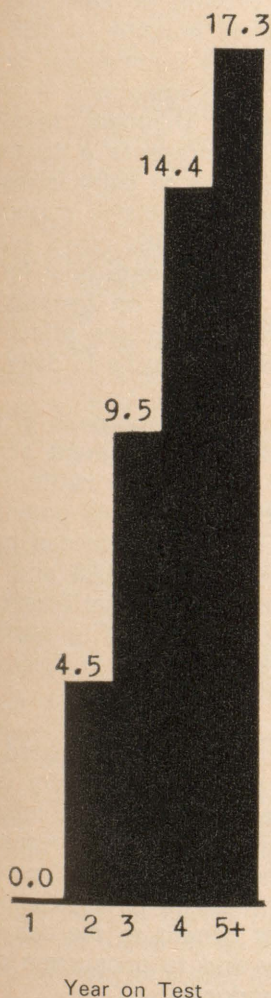
Milk production per cow continues to increase with each additional year on test.

Macdonald College Dairy Breeds of Canada, is designed to provide official identification to grade cattle enrolled in dairy herd improvement programs. All herds enrolled in the DHAS official test option that have grade cattle must participate in NIP. NIP is available to owner-sampler herds and its use is encouraged.

Other recent developments at DHAS include the acquisition of a new IBM 360/22 computer and the introduction of a monthly newsletter to DHAS dairymen. The new computer is better equipped to handle the increasing work load of a growing DHAS program and is better suited to research applications than the previous computer. The newsletter provides the dairy farmer with timely scientific information on the feeding, selection, and care of dairy cattle and acquaints participating farmers with new developments at DHAS.

made of the Macdonald College dairy herd and other College Farm facilities. The research program is designed to develop and improve the DHAS management service as

Percent Improvement in Return Over Feed Costs Per Cow



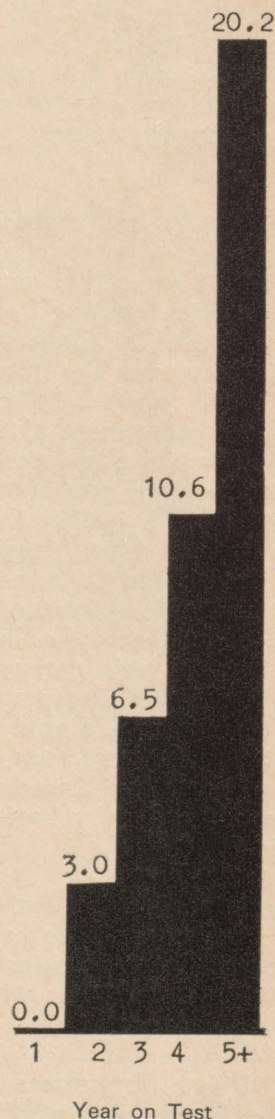
Dairy Records Research

Increased research activities have been a major new development at DHAS. DHAS was originally conceived as a two-phased program — a management service and a dairy cattle research centre. As the volumes of data amassed over the past years grow, the research aspects of the DHAS program assume an increasing importance.

Last year the Quebec Agricultural Research Council awarded DHAS a substantial grant for coordinated research activities involving dairy records. The grant has allowed DHAS to hire a full-time research professional plus additional technical assistance.

The research program at DHAS is concerned with the general areas of dairy cattle genetics, nutrition, reproduction, and management. Most research projects are cooperative efforts between DHAS personnel and members of the Animal Science Department. While dairy records from the DHAS data files form the core of the research activities, support use is also

Percent Growth in Herd Size



As herds are on test longer, they grow larger and more efficient.

well as to provide new scientific information for the improvement of our dairy industry.

Genetics studies at DHAS are primarily concerned with methods and techniques for the evaluation of A.I. sires. These studies are co-ordinated with the development of the official test option and the NIP program. Different methods of sire evaluation, using both officially supervised and owner-sampler records, are currently being investigated.

DHAS is involved in a cooperative research project with the Canada Department of Agriculture and the Quebec Artificial Breeding Centre at St. Hyacinthe. This project is designed to evaluate the potential use of Finnish Ayrshire bulls for the genetic improvement of the Canadian Ayrshire population. The project involves the cooperative participation of 32 Quebec DHAS Ayrshire herds in which daughters of both Finnish and Canadian Ayrshire bulls will be compared for milk production and type. In conjunction with this project, the Quebec Agricultural Research Council is supporting a study at Macdonald to compare male calves from the Finnish and Canadian bulls for veal and dairy beef production.

A study, in conjunction with the College Farm, to evaluate genetic differences between sires for stress susceptibility among their offspring, is also in progress.

The DHAS data files form a unique data base for research studies on milk composition. The milk analysis laboratory has, since its inception in 1966, recorded both the fat and protein composition of processed

milk samples. This has provided DHAS with North America's largest accumulation of data on the protein content of milk. Past and present research on milk protein content involves the estimation of genetic and environmental parameters affecting protein yield and percent protein and their application to sire selection.

Research is also being conducted on the calibration of milk analysis laboratory equipment and methods of assuring their precision and accuracy.

Nutritional studies conducted at DHAS are primarily involved with evaluating the effects of different levels of net energy intake from silage, hay and meal feeding on milk yield and composition and comparing DHAS feeding recommendations with other feeding standards for efficient milk production.

Preliminary work is also being done on factors affecting herd reproductive performance.

Future Developments

It is difficult to separate future developments in the research program from those of the management service as the two are intertwined. Some future developments will relate to past work while others will be new. Continuing work will be performed in the areas of A.I. sire evaluation and the genetics of milk protein composition. A detailed investigation of factors affecting reproduction in the cow herd is planned.

A future nutritional study, which will involve the cooperation of 10 DHAS herds, will compare

different feeding recommendations on the basis of milk production, feed costs, and overall cow performance. A study of factors which motivate herd improvement is also planned.

Perhaps the most exciting possible development in the future, from both a research and management service standpoint, is the hoped for introduction to the milk analysis laboratory of an automated cell counter capable of detecting the presence of mastitis in milk samples. The commercial development of such equipment is currently underway in Denmark. Mastitis presently represents a tremendous economic loss to dairy farmers and a routine, inexpensive method of testing for mastitic cows would provide a large data pool for much needed research on genetic and environmental factors affecting the incidence of mastitis in dairy herds.

This integrated approach of a dairy cattle management service coupled with a dairy cattle research centre has undeniable potential. At Macdonald it provides research professionals at DHAS and the Department of Animal Science with an 85,000 cow herd to study methods of improving dairy cattle production.

It is through the coordinated activities of the DHAS dairy farmers, field staff, milk analysis laboratory, computing centre and research personnel that the DHAS program will continue to develop and be of direct benefit to the dairy industry and to consumers of dairy products.

Prof. B. W. Kennedy,
Department of Animal Science.

A Survey of Nitrate Content of Well Waters

The nitrate nitrogen content of waters has received increasing attention from scientists in recent years. Nitrate, when present in excessive amounts in water supplies, poses health hazards to livestock and humans. In addition, it is one of the factors leading to excessive plant growth and eventually to eutrophication of lakes.

Methemoglobinemia in infants is a documented health hazard from drinking water containing high nitrate. Poisoning in ruminants, particularly cattle, is common in areas with groundwaters containing more than 10 parts per million (ppm) nitrate nitrogen. Incidences of death of livestock as well as humans due to drinking water from wells containing excessively high amounts of nitrate nitrogen (more than 300 ppm) have been reported. Some of these factors were discussed at a symposium on "Nitrogen in Soil and Water" published by the University of Guelph.

Nitrate itself is not very toxic, but it is readily converted to nitrite under anaerobic conditions and by the action of rumen microorganisms. It is in this form that nitrogen becomes extremely toxic. Nitrite converts the hemoglobin in blood to methemoglobin which cannot transport needed oxygen from lungs to body tissue. The victims of nitrate poisoning show general symptoms of oxygen deficiency. Health authorities have set the safe upper limit of nitrate nitrogen at 10 ppm for water to be fit for drinking by livestock and humans.

Nitrogen is an important fertilizer element for crop growth. But when nitrogen gets into lakes and streams it stimulates undesirable growth

of algae and aquatic weeds, and finally leads to eutrophication of water bodies.

These hazards of nitrogen in water suggest that a close watch should be kept on the nitrate status of water. This prompted us to survey the nitrate content of farm water supplies in Québec.

Materials and Methods

The survey was carried out in the spring of 1971. Printed forms and sample bottles were given to the fieldmen of the Dairy Herd Analysis Service of Macdonald College. The fieldmen distributed them to farmers using DHAS. The forms required information on the date the sample was taken, depth of well, depth to water table, distance from manure pile, use to which water is put, etc.

The location of the samples received is shown on page 8. The samples were analyzed for nitrate in the Soil Test Laboratories at Macdonald College. The results were returned to the farmers via DHAS.

Results

A total of 341 water samples from wells and nine from natural streams were analyzed for nitrate. The majority of the samples were low in nitrate. The breakdown of results is given in Table 1.

Of the total, 254 samples contained less than 1 ppm nitrate nitrogen. The nitrate content of 336 samples (96% of total) was within the safe limit of 10 ppm. Only 14 samples, or less than 5 per cent of the total, contained nitrate nitrogen in excess of 10 ppm. But 8.6 per cent of the samples contained more than 5 ppm nitrate nitrogen. This level indicates significant contamination.

The wells from which the water samples were collected were categorized according to the distance from manure pile and depth to water level. The results are given in Tables 2 and 3 respectively. Three-quarters of the wells were more than 100 feet away from manure piles.

The water level in the wells was quite close to the surface. In more than half of the wells (57.3 per cent), water was within 10' from the surface. Only 14.5 per cent of the wells had a water level deeper than 25' from the surface.

Table 2. The distance of wells from manure piles.

Distance	% of total
less than 50 ft.	3.8
50 — 100 ft.	18.3
101 — 200 ft.	37.0
201 — 400 ft.	24.5
more than 400 ft.	16.4
	100.0

Table 1. Summary of results of nitrate analyses of well waters on Québec farms.

Nitrate Nitrogen contents	No. of samples	% of Total
less than 1 ppm.....	254	72.6
1.0 — 5.0 ppm.....	66	18.8
5.1 — 10.0 ppm.....	16	4.6
more than 10 ppm.....	14	4.0
	350	100.0

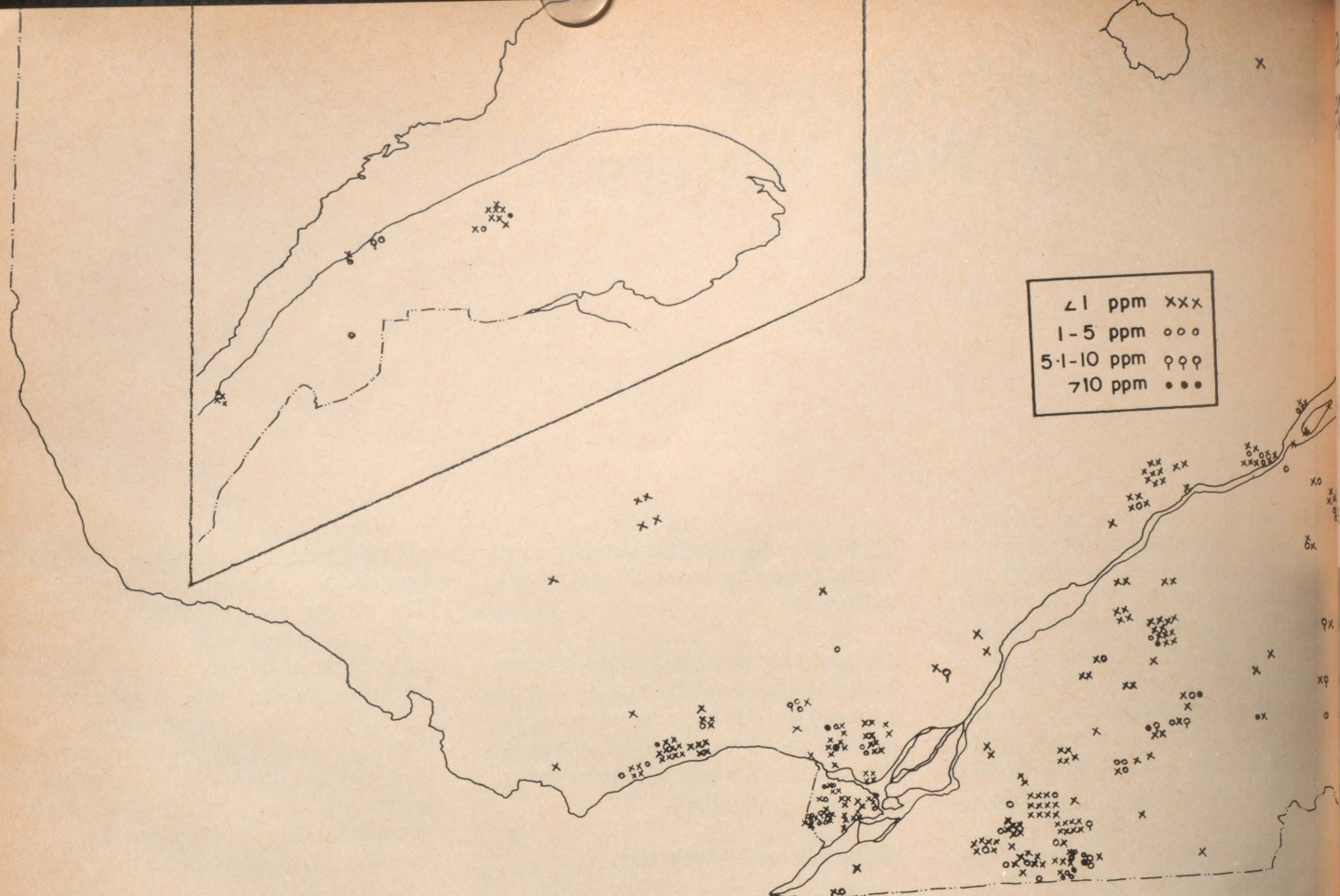


Table 3. Depth to water level in the wells.

Depth	% of total
less than 5 ft.	18.7
5 — 10 ft.	38.6
11 — 25 ft.	28.2
more than 25 ft.	14.5
	100.0

The concentrations of nitrate in water samples from natural streams (Table 4) were low. In one case the nitrate may have come from the manure pile 50' away.

The information supplied with water samples containing more than 10 ppm nitrate nitrogen is given in Table 5. There is no obvious relationship either to shallow wells or to nearness to manure piles to explain the nitrate found in the samples. Contamination is probably most often the result of flow of surface water into the well. The conditions around the manure pile and the slope toward the well determine whether contamination will come from manure. These conditions should be checked by the farmer.

Table 4. Nitrate in water samples from flowing water.

Sampling Date	Location of stream	Distance from manure pile (ft)	Nitrate Nitrogen Content (ppm)
April 26	Near house	300	0
April 27	Near road	200	0
April 27	Near stable	75	0
April 27	In front of barn	50	2.0
April 28	Near farm	600	0
April 29	Near barn (spring well)	450	1.2
April 28	Near farm	—	0
April 23	Near house (Ottawa River)	150	0
April 23	Near house (Ottawa River)	200	0

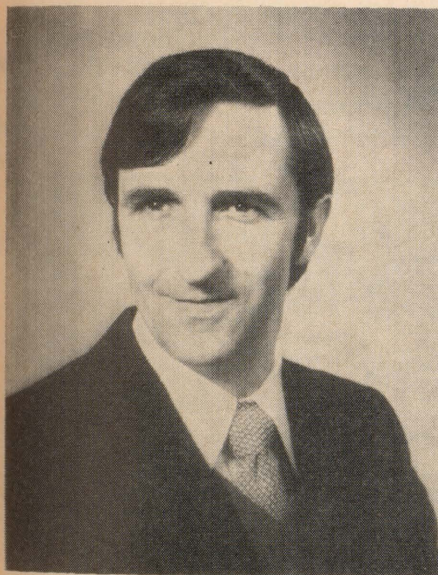
Table 5. Sources of water contamination by nitrate in wells containing nitrate nitrogen in excess of 10 ppm.

Sampling Date	Location of well	Distance from manure pile (ft.)	Depth to water level (ft.)	Use	Nitrate Nitrogen content (ppm)
April 4	Near stable	100	8	Livestock	15
April 13	" "	200	12	"	20
April 16	" "	100	5	"	more than 10
April 20	" "	200	12	"	10
April 21	" "	110	12	Livestock/house	30
April 27	" "	75	32	Livestock	15
May 3	Near house	400	9	Livestock/house	11
May 3	" "	300	6	House	20
May 5	" "	250	10	Livestock/house	11
May 5	—	100	—	"	25
May 5	—	75	20 — 150	Livestock	12
May 7	Near stable	300	10	"	19
May 12	Near house	300	1	Livestock/house	16
May 13	In the field	—	10	"	12

M. M. Iqbal and
B. P. Warkentin,
Soil and Land Resources,
Dept. of Renewable Resources.

Macdonald Reports

Dr. S. P. Touchburn



We are pleased to announce the appointment of Dr. Sherman P. Touchburn as Professor and Chairman of the Department of Animal Science.

Dr. Touchburn is a Canadian, born in Saskatchewan, who received his schooling in Vancouver and went to the University of British Columbia from which he received his B.S.A. ('54) and his M.S.A. ('56). He then went to Ohio State University and received his Ph.D. in 1959. He transferred to the staff of the Ohio Agricultural Research and Development Center of Ohio State University at Wooster but remained associated with the Department of Poultry Science, Ohio State University, latterly as Associate Chairman.

Dr. Touchburn spent 1970-71 in France at Tours in the Station de

Recherches Avicoles and is proficient in French and in German.

We welcome Dr. Touchburn, his wife, Gisela, and their three children to the Macdonald community.

Emile A. Lods Agronomy Research Centre

The special research facilities of McGill's Agronomy Department at Macdonald College were named on July 19, 1973, the Emile A. Lods Agronomy Research Centre. The ceremony, which was attended by representatives of the Federal and Provincial Government, La corporation des agronomes de la province de Québec and many other interested groups, honoured a great pioneer who made sig-

nificant contributions to the agricultural industry in Quebec and across Canada.

Emile A. Lods was a member of the second (1912) graduating class from Macdonald College and taught there from 1916 until 1954. In 1920 he took charge of the cereal crop breeding at Macdonald College. His efforts culminated in the release of the Montcalm barley variety, an outstanding variety with exceptional malting qualities. The contribution that Montcalm made to Canadian agriculture was recognized in 1953 when he was presented with a testimonial from barley growers and members of the barley industry



From left to right: Dr. Harold Klinck, Chairman of the Department of Agronomy, Dr. W. Rowles, who unveiled the memorial plaque, and Dr. A. C. Blackwood, Vice-Principal of Macdonald College.

of Canada, including some 23 grain companies, seed growers' associations, etc. In the testimonial they stated, "Montcalm has done more to stabilize barley production in Canada than any other single variety".

In 1920 Dr. Lods initiated, with the cooperation of the Quebec Department of Agriculture, the Provincial Seed Farm, which began at Ste-Rosalie, Quebec in 1920. It was transferred to Macdonald College in 1931, and served the farmers of Quebec for some 52 years, of which 39 of these were under the direction of Professor Lods. It was discontinued in 1971.

Professor Lods retired from full-time teaching at Macdonald in 1954, but continued for another five years as Director of the Seed Farm. He died in 1972.

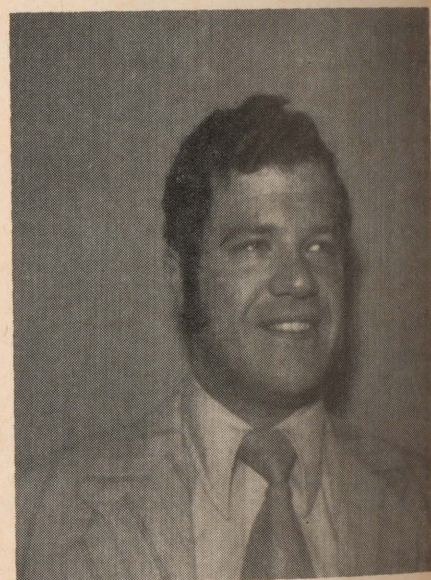
Before the ceremonies Professor Harold Klinck, the present chairman of the Agronomy Department, guided the guests on a tour of the 45 acres now used for its experimental work. After the visitors had seen the laboratories facilities, the memorial plaque to Dr. Lods was unveiled by Dr. W. Rowles, a retired Macdonald College professor, on behalf of Dr. Lod's daughter, Margot, who was unable to be present.



Gerard Seguin, (right) class '73 Diploma Agriculture received the Ralston-Purina (Canada) prize for the year's best project. The company was represented at the ceremony by Michael O'Reilly, who graduated from Diploma Agriculture in 1971. For the project, the student is required to re-plan an existing farm to meet the challenges and changes of the next five years. Gerard chose an apple orchard, situated in the Frelighsburg district, for his project. This is an agricultural enterprise in which he is intensely interested.

Dr. Thomas G. Hartsock

We are pleased to announce the appointment of Dr. Thomas G. Hartsock to the position of Assistant Professor of Animal Science.



Professor Hartsock is a native of Pennsylvania and came to Macdonald from Pennsylvania State University where he obtained his B.Sc. in Animal Science, his M.Sc. in Animal Industry, and his Ph.D. in Animal Nutrition. Though a Ph.D. in Animal Nutrition, his doctoral work was interdisciplinary in that it involved a study of the interaction of nutrition and nursing behaviour in the growth and development of swine. His work in the Department of Animal Science will include teaching and research in the monogastric nutrition field and in nursing behaviour and production aspects of swine.

A warm welcome is extended to Professor Hartsock, his wife, Charlene, and their young son.

The Family

Farm

Published in the interests
of the farmers of the province
by the Quebec Department of
Agriculture and Colonization

Home-grown feed

The profitability of any livestock production and the possibility of remaining competitive depend upon three basic factors which may be said to form the vital triangle, namely genetic improvement, animal health, and feed costs.

Of these three factors, the first two have been the object of special governmental measures and Quebec will soon attain marked superiority in these two fields, if it has not already done so.

But as regards the third factor, which directly affects production costs, we are so far behind the other provinces that the effects of our technical superiority are cancelled out and we are not able to compete.

The future of our livestock industries is closely linked with our domestic production of grain and forage. The Department of Agriculture and Colonization therefore wishes to launch a comprehensive livestock program of which self-supply of feed grains and forage is an essential element.

PURPOSE: This program is designed to achieve the highest possible degree of self-sufficiency as soon as possible.

SECONDARY AIMS

1. To bring all the arable land in Quebec into use according to regional biophysical and economic possibilities;
2. To double and even triple our yields, quantitatively and qualitatively;

3. To make high-moisture corn grown in southern Quebec available to all livestock raisers in the province;
4. To reduce the cost of meal by demonstrating the financial advantages of domestic production and by promoting the purchase of feed grinders.

MEANS

1. Setting, for each of the recommended crops:
 - a) the rate of annual increase and final targets to be attained;
 - b) the quotas to be assigned to each of our 12 agricultural regions.
2. Credit priorities
 - a) For production: to farmers who participate in this program and agree to help realize our aims and follow the technical advice of our agronomists and who desire to increase their arable acreage after having made the most of the land they already have under the plough;
 - b) For land: to farmers who meet the conditions of the preceding paragraph and prefer to buy more land rather than lease it;
 - c) Farm improvement: to farmers who wish to improve their feed storage equipment — dryers, silos, etc., and their conditioning equipment — feed grinders, etc., with the object of reducing their feed costs.

3. Intensive promotion
 - a) Personal contact, group information, and mass media;
 - b) Organization of provincial and regional competitions;
 - c) Demonstrations under the auspices of agricultural societies on the farms of producers who are already growing the crop(s) in question.

4. Transportation aid policy making high-moisture corn grown in the southern regions equally available to all livestock raisers in the province. This policy will:
 - a) Relieve corn growers of the temporary surpluses which flood the market at harvest time;
 - b) Give livestock raisers the benefit of: lower prices (in general, the average price in the fall is \$5 a ton less than the price which must be paid in winter); drying costs saved — \$7 a ton; direct dealing with the grower.

RECOMMENDED CROPS AND ZONING

The following crops are to be recommended with a view to attaining self sufficiency: grain corn, fodder corn, high-yielding spring wheat, barley, alfalfa, soybeans, hay and pasture. Production zones for these crops are as follows:

Regions I, IX and XII: Wheat, barley, alfalfa, hay and pasture.
Regions II, III, IV, VIII, X and XI: Fodder corn, wheat, barley, alfalfa, hay and pasture.
Regions VI and VII: Grain corn, fodder corn, soybeans, wheat, barley, alfalfa, hay and pasture.
Region V: Fodder corn, wheat, barley, alfalfa, pasture, soybeans, hay.

I - GRAIN CORN

1. Designated regions: VI and VII.

2. Targets

1973-74	155,000 acres
1974-75	170,000 "
1975-76	185,000 "
1976-77	200,000 "
1977-78	215,000 "

3. Measures

a) Aid for the transport of high-moisture corn to the extent by which shipping costs exceed \$3 a ton, but with a maximum limit of \$3 a ton for regions II, III and V and of \$8 a ton for regions I, IX and XII;

b) Technical aid for buying and constructing storage and conditioning equipment — silos, dryers, and feed grinders.

Provision for the following transported quantities

1973-74	15,000 tons
1974-75	25,000 "
1975-76	35,000 "
1976-77	45,000 "
1977-78	60,000 "

II - FODDER CORN

1. Designated regions: II, III, IV, V, VIII, X, and XI.

2. Targets

1973-74	120,000 acres
1974-75	140,000 "
1975-76	160,000 "
1976-77	180,000 "
1977-78	220,000 "

3. Measures

a) Organization of competitions in the regions concerned. A sum of \$2,000 will be distributed each year in prizes for outstanding yields and quality;

b) Preparation of leaflets describing the high yielding capacity and energy content of this crop;

c) Increased technical information

and demonstration of the savings achieved.

III - SPRING WHEAT

1. Designated regions: all agricultural regions of Quebec

2. Targets:

1973-74	40,000 acres
1974-75	60,000 "
1975-76	80,000 "
1976-77	110,000 "
1977-78	135,000 "

3. Measures

a) Grant for extra acreage. Assistance decreasing from \$10 to \$5 an acre, with a maximum of \$200 per farmer, in all agricultural regions of Quebec except regions VI and VII where it will be in effect till 1975. Growers already participating in a subsidized program for the production of spring wheat seed cannot have this subsidy at the same time. Only certified or registered varieties of Opal or Pitic 62 wheat will be eligible.

b) Setting of production targets for each agricultural region and increased technical aid.

IV - BARLEY

1. Designated regions: all agricultural regions of Quebec.

2. Targets:

a) Seeded acreage:	
1973-74	25,000 acres
1974-75	30,000 "
1975-76	35,000 "
1976-77	40,000 "
1977-78	40,000 "

b) Raise the average yield to 40 bushels per acre.

3. Measures

a) Preparation of leaflets showing

the superior feeding value of this crop as compared with oats;

b) Increased technical aid.

V - ALFALFA

1. Designated regions: all agricultural regions in Quebec.

2. Targets

1973-74	360,000 acres
1974-75	520,000 "
1975-76	680,000 "
1976-77	840,000 "
1977-78	1,000,000 "

3. Measures

a) Organization of annual competition in each of the 12 agricultural regions of Quebec and an annual provincial competition for the five finalists in each regional competition. The Department of Agriculture will allot \$15,000 every year for prizes. Contributions by non-government organizations may be added to this sum;

b) Increased technical aid.

VI - SOYBEANS

1. Designated regions: V, VI, VII and X.

2. Targets

1973-74	5,000 acres
1974-75	10,000 "
1975-76	15,000 "
1976-77	20,000 "
1977-78	25,000 "

3. Measures

a) Organization of an annual provincial competition. The Department of Agriculture will give \$1,000 in prizes for exceptional quality and yields;

b) Increased technical aid;

c) Increased herbicide research.

VII - HAY

1. Designated regions: all agricultural regions of Quebec.

2. Targets

a) Reduce the area in hay by about 500,000 acres and use the acreage so freed to grow more nutritive grain and silage.

1973-74	100,000 acres
1974-75	200,000 "
1975-76	300,000 "
1976-77	400,000 "
1977-78	500,000 "

b) Increase the acreage kept in hay by one ton per acre and improve the feeding quality of the fodder.

3. Measures

a) Preparation and distribution of leaflets;
b) Increased research into haying and forage keeping methods.

VIII - PASTURES

1. Designated regions: all agricultural regions of Quebec.

2. Targets

a) Devote about 300,000 acres of the land now in pasture to more profitable crops;

1973-74	60,000 acres
1974-75	120,000 "
1975-76	180,000 "
1976-77	240,000 "
1977-78	300,000 "

b) Increase the rate of growth in the remaining pasturage by more careful choice of plants and fertilizers.

3. Measures

Starting in 1974, organization of an annual provincial competition with the help of \$6,000 a year from the Department of Agriculture.

SUBSIDY FOR PEDIGREED SEED PRODUCTION

In view of the need and cost of top-quality seed of the cereal varieties specially recommended by the Quebec Plant Productions Council, the Department of Agriculture grants a subsidy of \$4 per acre sown to registered or foundation pedigreed seed, with a view to the production of pedigreed seed in Quebec by farmers who are members of the C.S.G.A.

Farmers already participating in a subsidized pedigreed seed production program are not entitled to this grant at the same time.

Together with his claim, the grower must submit to the Plant Productions Division at Quebec, a copy of the seed certificate issued by the Plant Products Division at Montreal at the time of sealing and showing the kind, variety, grade and number of pounds sealed, and the crop certificate issued by the C.S.G.A.

This subsidy will apply to the 1973 crop. This assistance policy replaces the preceding one and will remain in force until further notice.

Growers whose crop cannot be sealed must give the reason or reasons when making their claim.

CALCAREOUS AMENDMENTS AND FERTILIZERS

Lime and commercial fertilizer are

among the basic factors of all profitable crop productions. Thanks to transport subsidies, farmers all over Quebec are enabled to raise the productivity of their land at uniform cost.

Nature of grants

a) Lime
Shipping costs by water or rail are borne entirely by the Department.

In the case of transport by truck, the subsidy is as follows: 25¢ a ton for the first 5 miles; 12¢ a ton for the next 5 miles; 7¢ a ton for each subsequent mile travelled with load provided that the rate is not higher than the railway freight rate, except in very special circumstances.

The maximum subsidy will be \$3.95 per ton for a distance of 40 miles or more.

A subsidy of \$2 a ton to buy lime in bags and of \$1.25 per ton to buy lime in bulk will be paid to farmers in region IX.

b) Marl and refinery residues
Transport subsidies for marl are in force for region I in the case of ponds under the Department's control.

Transport grants on refinery residues are in force for districts near St. Hilaire, as follows: 25¢ per cubic yard for the first 2 miles; 7¢ per cubic yard for the next 18 miles.

Eligibility

In the case of calcareous amendments, a permit must be obtained beforehand from your local agricultural information office.

c) Commercial fertilizer
The transport subsidy on commercial fertilizer applies to all municipalities over 40 miles from a manufacturing plant or distribution centre.

Transport charges in excess of \$3 a ton will be reimbursed up to a maximum depending on the distance.

DESCRIPTION AND COMPOSITION OF QUEBEC'S AGRICULTURAL REGIONS

REGION I: Lower St. Lawrence, Gaspé and Magdalen Islands, comprising the following counties: Gaspé North, Gaspé South, Matane, Matapédia, Bonaventure, Rimouski, Rivière-du-Loup, Témiscouata, Kamouraska, and the Magdalen Islands.

REGION II: North and South Banks of the St. Lawrence, comprising the following counties: Bellechasse, Portneuf, Montmorency, Charleboix, Lotbinière, Lévis, Montmagny, l'Islet, and Quebec (Chauveau).

REGION III: Beauce, Dorchester, Megantic, and Frontenac.

REGION IV: Nicolet, Arthabaska, Drummond, and Yamaska.

REGION V: South of Quebec, comprising the following counties: Sherbrooke, Wolfe, Richmond, Compton, Stanstead, Brome, and Shefford.

REGION VI: East of Montreal, comprising the following counties: Richelieu, Verchères, Bagot, St. Hyacinthe, Rouville, Iberville, Missisquoi.

REGION VII: Southwest of Montreal, comprising the following counties: Vaudreuil-Soulanges, Huntingdon, Beauharnois, Châteauguay, Napierville, St. Jean, and Laprairie.

REGION VIII: Ottawa Valley agricultural regions, comprising the following counties: Gatineau, Argenteuil, Hull, Labelle, Papineau and Pontiac.

REGION IX: Northwest of Quebec, comprising the following counties: Abitibi East, Abitibi West, Rouyn-Noranda, Témiscamingue.

REGION X: The North Bank of the St. Lawrence, comprising the following counties: Berthier, Joliette, Montcalm, Terrebonne, Deux-Montagnes, L'Assomption, Ile-de-Montréal.

REGION XI: The St. Maurice Valley, comprising the following counties: Champlain, Trois-Rivières, St-Maurice, Laviolette, and Maskinongé.

REGION XII: Saguenay-Lake St. John, comprising the following counties: Roberval, Lake St. John, Chicoutimi, Saguenay-Duplessis.

Aid for Quebec Farmers Who Employ Welfare Recipients

In connection with the Quebec government's drive to find employment for people — "Opération placement" — the Quebec Department of Agriculture will make a financial contribution to help pay the wages of welfare recipients who are prepared to work in agriculture.

There is now a serious labour shortage in several sectors of Quebec's economy, including farming. At the same time, a considerable number of persons who are fit to work and could hold jobs are having to be given financial assistance.

To remedy the situation, the Quebec Department of Agriculture offers financial aid to all farmers who agree to employ social welfare recipients and to pay them a minimum wage of \$1.70 an hour including accessory salary benefits. This aid will amount to 40 per cent of the wages paid, with a maximum of \$35 a week or \$600 per year per employee.

Conditions

The employer must be operating in the field of agriculture at the production level and his labour needs for the working of his farm must be greater than he and his family can normally cope with by doing the work themselves.

The farmer must operate a paying farm ("une ferme rentable") and must undertake to give employment to a welfare recipient during the 1973-74 fiscal year for a continuous period of at least 12 weeks. This condition, does not, however, apply to apple growers or producers of maple products.

Farmers interested in this policy may apply directly to the Quebec Department of Agriculture's local offices, where they may make their application. When this has been approved, they will go to the nearest Manpower Centre to consult the list of welfare recipients who are fit to work and engage one or more of them.

Mr. Paul Emile Beaudry with some of his 100 dairy cows. Every year he exports Holstein cattle to various parts of the world.



The first reimbursement may be claimed after the 12th week of hiring the welfare recipient. Application for it must be filed with the Department's local office.

Aid for the Transport of Milk and Cream to Producers Shipping to Non-Regional Factories

This assistance is granted by the Quebec Department of Agriculture on the following terms:

REGULATIONS

1. It will be granted to factories whose milk or cream suppliers have above-normal shipping costs.
2. A transportation rate of 30 cent per hundred pounds in the case of milk and of 3 cents per pound of fat in the case of cream is considered normal.
3. Only industrial milk and cream producers in the following agricultural regions are eligible under this assistance policy: Numbers 1 (Rimouski), 2 (Quebec), 3 (Beauce), 8 (Buckingham), 9 (Northwest), and 12 (Lake St-John).
4. Eligible producers will be considered to be those located outside a circle with its centre at the factory and a diameter of 30 miles.
5. Producers must ship their milk or cream to the nearest dairy factory.
6. Costs incurred for the transport of milk or cream must be charged entirely to the producers.
7. The carrier and the factory must be prepared to supply all information necessary for the honouring and verification of the terms of this assistance policy.
8. In the case of delivery in the form of milk, the quantities

concerned will be converted to fat for payment purposes.

9. In no case will the Department's aid be more than the deficit incurred.

10. Reimbursement will be made to the factory for distribution to the producers, as follows:

- 5,000 pounds of fat or less
- 80% of the difference over 3¢
- 5,001 to 20,000 pounds of fat
- 50% of the difference over 3¢
- 20,001 to 30,000 pounds of fat
- 40% of the difference over 3¢
- 30,001 to 40,000 pounds of fat
- 30% of the difference over 3¢
- 40,001 and over pounds of fat
- 20% of the difference over 3¢

11. Proof of any misrepresentation or false statement will lead to cancellation of all such promised aid.

12. This policy covers the period from January 1st to December 31st.

CONDITIONS

1. Only producers of industrial milk are eligible for this grant.
2. The location of the dairy factory which receives the producer's milk will decide whether the producer belongs to zone B.
3. The dairy plant must undertake to supply the Department with all information needed for the purpose of making the equalization payment.
4. Any false statement will entail cancellation of the subsidy.

PAYMENT

The Department undertakes to reimburse up to 50 per cent of the difference in price existing between zones A and B.

Equalization of Price Paid for Milk

Under certain conditions, the Quebec Department of Agriculture grants compensation to milk producers in handicapped areas of zone B as described in the sales agreement between the industrial milk producers' Federation (la "Fédération des producteurs de lait industriel") and the industrial milk dealers.

QWI

Handicrafts

As mentioned in the last issue, Miss Suzanne Auger, from the Quebec Department of Agriculture and Colonization, kindly consented to an interview during the recent Convention. Here, in part, are some of her comments.

"Although I judged the handicrafts exhibition a few years before coming to the Convention, this is the twelfth year I have come from Quebec City to Macdonald and I enjoy it very much.

"Yes, I have seen changes, and for the better, over the years. There have been changes in technique as well as changes in taste. For instance, macrame is a new interest as are Christmas cards, which are quite effective. As these things are not so expensive, the women try out new ideas.

"Sometimes it is very hard to judge. If we have 17 pairs of pillow cases it can be harder to judge than five pairs, but then if you only have five pairs it is hard because you think the last one won't get a prize and you are sorry. I think the ladies should realize how nice their exhibition was this year — I'm sure I don't have to tell them. The competition was excellent and it was really a pleasure to handle every one of the pieces and to realize how many hours of work went into them. They really are precious articles and I only feel sorry that I cannot award prizes to every one. The judging is done by comparison one to another. I can find the first prize and then see how the others compare and that's how they are given points. If I give 96 it is not because it is

bad but rather because, compared to the others, it is not as good.

"The J & P Coats competition was interesting but very difficult to judge. Judging three pieces such as luncheon sets, pillow cases and little coasters together doesn't seem quite fair to me. The first prize this year is just a beauty. Perfectly made from inside to outside. I feel that they should try to find more original designs — many are copied — but I realize that it costs more to try something new and they feel they might miss out. On Christmas cards, which are not expensive, they tried new ideas and one of the entries in particular was very interesting. The exhibitor had just stuck little papers together making a collage with very clever designs on it and all were different. There must have been 34 to 36 pairs of pillow cases to judge. Some had lace made with needles or made with crochet or tatting. These were clever and very well made, too. I had to judge for thread according to material and the way it was sewed to the material.

"The crib quilts were very interesting, especially the one that won second prize. It was most attractive. Most of them had embroidery but I think that patches are even nicer."

I asked if younger members are taking an interest in handicrafts.

"Although I don't know, of course, who the winners are, I think that the prizes go to the older members. Younger people don't, as a rule, embroider as well. It takes some rhythm. I would like to see younger people trying their hand. Macrame is not expensive, it is easy, and

you can pick it up and put it down again. I realize that they were asked to make a belt but they could try other things. You can make nice purses with ordinary string. Interesting murals can also be made quite cheaply.

"I would like to mention the Oka women's handicrafts. They are very well made and have proved quite successful. They've sold already more than half of what they brought. One of the belts, for instance, was a real beauty and sold very quickly. The wall hanging made with dried grains and dried legumes was very clever and had the nicest colours. I think the ladies are smart to bring things and sell them as they are the only ones doing it and they have been successful.

"I always enjoy coming to Convention and I'm lucky that I'm still here because I don't travel anymore. I judge the provincial 4-H Club competition at provincial level and EXPO Quebec."

Argenteuil's Tenth and Newest Branch

Grenville W. I. was formed last September with 13 members joining. We have already increased our membership to 18 and are pleased with our various activities to date. The conveners have read interesting articles on many subjects; at one meeting we had a bingo with very satisfying results. This spring members with slips, plants, or bulbs brought them to a meeting and we sold them by auction. We have donated to a white elephant table. We have had a speaker discuss the metric

system and the daughter of one of our hostesses kindly showed us slides of different places in Canada.

Members from Grenville attended the annual county convention at Lachute and enjoyed it very much, and four members attended the annual convention at Macdonald College and brought back good reports. Some of the members exhibited handicraft articles at the W.I. booth at the Lachute Fair.

Megantic County's Project for 1973

At a recent meeting of our **Kinnear's Mills** branch a junior member, Mrs. Patricia Lowry, introduced the subject of recycling of garbage. All members decided that this would be a worthwhile project in which to become involved.

Inquiries were made, and it was discovered that a collection depot had been set up in the nearby city of Thetford Mines. Accepted at this depot are all kinds of waste paper, including old telephone directories, newspapers, magazines, boxes, and cartons. Milk cartons, waxed paper, or tin foil are not acceptable. In addition, glass jars, bottles, etc., either coloured or clear, are acceptable providing they have been washed clean.

The depot is open on Wednesday and Friday evenings from 5:30 to 7:30 when someone is there to check and help unload. On Thursday, however, a key is obtainable at the on-site drugstore, even though there is no one there to check or help unload. All paper and glass is picked up at this depot and taken to a plant where the actual recycling process takes place.

Our only other branch, **Inverness**, was pleased to receive this information and has decided to follow in the footsteps of their sister branch.

A Celebration

The **Wyman** Women's Institute in Pontiac County celebrated their 60th Anniversary on May, 8, 1973. Members, former members, and friends gathered in the United Church Hall in Shawville where the ladies of the church served a delicious banquet.

Charter member, Mrs. Jas. A. Graham, 89, presided at the piano for the singing of "God Save the Queen." Wyman's first bilingual President, Mrs. Stephen Fitzsimmons, welcomed all present in both French and English. Seated at the head table were: Mrs. Muriel Kelley, Mrs. Walter Kilgour, County President, Mrs. Henry McCord, Mrs. Roland Graham, Program Chairman, Mrs. Stephen Fitzsimmons, Mrs. Cecil Sly, Mrs. Melvin Stewart, and Mrs. Jas. A. Graham.

Mrs. McCord entertained the members with two amusing monologues; Mrs. Jas. Campbell read an "In Memorium" poem and Mrs. Walter Kilgour noted that Wyman and Elmside had joined as one Institute in 1904. The guest speaker, Mrs. Cecil Sly, spoke on the meaning of anniversaries and gave two amusing recitations.

A 50-year pin was presented to Mrs. Wyman MacKechnie and 25-year pins were presented to Mrs. Roland Graham, Mrs. Muriel Kelley, Mrs. Melvin Stewart, and Mrs. Raymond Trudeau. Miss Hilda Graham read "A Prayer for

the 60th Anniversary of Women's Institutes." It was truly a memorable evening.

Serving the Community

Granby Hill W.I. (Shefford Co.) celebrated their 49th Anniversary this past March and as each milestone rolls around there is always a time for reminiscence and some are heard to say "We're all getting older and we don't seem to do as much as we used to," but when the annual reports are read we all realize that our community would be a much poorer place if it weren't for all the things the W.I. do.

Besides our usual obligations to the Q.W.I. — the Service Fund and Pennies for Friendship — the following are some of the things that the Branch has accomplished:

We gave money to the local 4-H Club to provide garden prizes for children too young to be members of the Club and provided an indigent child at the local school with a daily hot lunch for the school year. We sent a parcel monthly to an adopted patient at the Douglas Hospital.

We maintained a picnic area. This has proved to be a very worthwhile project but quite expensive for the Branch. First started as a Centennial Project, husbands and friends made two tables and a sign, painted them and garbage cans in yellow with the Q.W.I. Crest. Members were responsible for cleaning the area, moving the grass, and emptying the garbage cans.

Over the years these tables were first damaged by vandals, then in the winter of 1971 they were stored in a member's barn which was destroyed by fire. Again we were lucky to have a member's husband who had the time to make and paint two more tables. Two weeks after being placed in the picnic area one was stolen. And about two months ago we put the other one out for this summer and it was stolen three weeks later!. With all our misfortune with this project we still feel it is worthwhile as we rarely passed this area in summer when it wasn't in use.

We always hold a community picnic on Dominion Day and a winter picnic for members and friends. A winter picnic may sound odd but it has been held now for several years and works like this. Members and friends each bring their own food and dishes. The W.I. provides the place and the refreshment committee are responsible for the tea, coffee, and ice cream. After supper cards and games are enjoyed during the evening and this way nobody is left in the kitchen after a big meal and everyone can enjoy an evening's fun.

Our one main money-raising project for the year is a card party and sale table, which is usually held in October at our local school. Frequently a quilt made and quilted by the members is raffled at this time.

Not too much as yet has been planned for our 50th Birthday, but one member is already busy at work on the History of our "Second 25 years".

Matagami

Twelve years ago, out of the depths of deep, dense forest in Abitibi North, sprang up the town of Matagami. It was strictly a mining town to open up Matagami Lake Mines, Orchan Mines, and Hosco Mines, which is now closed. Another has opened called Garon Lake Mines.

Only one road leads to Matagami which is 114 miles north of the nearest town, Amos. Up until last year the road was gravel but it is now paved. In the past two years the Hydro project has moved in here and built a bridge across the Bell River to travel further north to build dams, etc., for the Hydro project. This meant our population has doubled over the past two years. More stores and private homes, five large apartment buildings and construction businesses have been built. About 500 trailers have created a small town of their own. We have a hospital, churches, schools and a recreational centre for all ages which includes a theatre, library, bowling, indoor swimming pool, and auditorium. Other activities are curling, hockey, ball games and some fishing.

Winters are long and cold and we have about three summer months, some of which are very rainy. We make small gardens but it's more for a hobby to see what we can grow so far north. We find we can grow some things if the weather permits, but we work hard for the results we get.

We were not as active in our Institute as we would have liked to have been this past year but we are hoping for a better 1973-74.

A Local Tour

The **Waterloo-Warden** branch (Shefford Co.) was fortunate in being able to visit the greenhouses and mushroom houses of Slack Brothers. The tour was arranged by our Agriculture Convener, Mrs. A. Bazinet.

Our regular meeting was adjourned as soon as business matters were attended to, and the members left by car for the two-hour tour. When we arrived at the greenhouses we were shown the numerous varieties of plants and flowers in all stages of development. From the greenhouses we drove across town to the mushroom buildings where we were shown the mushroom beds and were told how the mushrooms are harvested and handled for shipping. We were then taken to the canning plant where we learned how the mushrooms are processed and canned.

At the conclusion of this most enjoyable and interesting tour we were shown a film on mushroom culture and enjoyed a brief coffee break and question period. On leaving the plant each member was presented with a beautiful deep pink carnation, grown on the premises, a book of gourmet mushroom recipes, and a package which contained both fresh and canned mushrooms — a gracious and delicious ending to a memorable afternoon.

The Hatley May Fair

Hatley Women's Institute (Stanstead Co.) held a May Fair at the village hall on Saturday, May 19. The Fair was well attended and



Mr. G. Parker gives a rug making demonstration at the Hatley W.I. Fair. Left to right are: Miss Alice Astell, Mrs. Richard Bowen, and Mrs. Charles Whitcomb.

enjoyed by both local people and those who came from a distance. Glennes Parker of North Hatley gave an excellent demonstration of rug making. There were several sale tables with W.I. members in charge. Another group took charge of the snacks sold. There was a fine display of patchwork blocks and several finished quilts in various patterns for sale and on display. One of special interest was made from wedding gowns of yesteryear in Log Cabin pattern.

A painting of a sugar bush and shanty, the creative art of Mrs.

Jean Lattin was sold and won by Mrs. D. Mitsen of Ayer's Cliff. A bag of groceries was won by Mrs. A. Breault of Beebe.

Children were entertained with movies and popcorn. So it was fun for all ages, an enjoyable fellowship, and profitable for the W.I. branch — enabling them to carry on their work for Home and Country.

Dear W.I. Members:

From **Stanstead** County's report: "Annual meetings, like Conventions, are always good for members and guests, especially the latter

for it sells W.I." I agree.

Several counties mourn the loss of valued and active members... in **Missisquoi** County, Flora Creller, Margaret Goodfellow in **Sherbrooke Co.**, and Mrs. Ray Waldron in Compton County.

Among the names of 65 persons to be invested in the Order of Canada next spring is that of Mrs. Florence Matheson, Vice-President of the Associated Countrywomen of the World.

I am very pleased with the descriptive reports I'm receiving of late — only wish we had room to publish more. It was interesting to read of the different guest speakers... **Kinnear's Mills** had a nurse give a talk on the care of home patients. She was accompanied by a home economist who discussed the patient's diet

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and then told the ladies what they should eat. Continuing education was the subject of speakers at **Argenteuil** and **Stanstead** county meetings. **Chateauguay-Huntingdon's** speaker was Mrs. D. Waisberg, President of the Cancer Aid League. The League is a non-sectarian association which gives financial aid to cancer patients to assist them with transportation costs, medicines, appliances, and costs of some treatments. The League also purchased and maintained the equipment used in the Breast Cancer Detection Clinic in the Jewish General and Royal Victoria Hospitals. The new machines can detect cancer much earlier than was previously possible. The clinics are open to all women. Further information can be obtained from the Cancer Aid League, 6555 Cote des Neiges, Montreal 249.

Branches and their members have been busy, too. **Huntingdon** Home Economics Convener showed how to make a complete quilt block, lined, inter-lined and quilted and then how to sew the blocks together. **Shipton** had a pot holder selling contest with Mrs. S. Taylor turning in the most money (\$5.00). A total of 200 were sold by members and friends. **West Island** saw a film "All Our Children" showing the work done by the Canadian Save the Children Fund. **Douglastown** had a member's bake sale with members buying each other's baking at 50 cents each. **Matagami** had a publicity booth (The work the W.I. does for its community) at the Lions Club Carnival. **Spooner Pond** presented a pageant at the Wales Home and **Gore** had a birthday party there. A **Scotstown** member is teaching embroidery to guides. **Stanstead North** entered a float in the June 30 parade in Beebe, celebrating the 100th birthday of the municipality. **Beebe** members were involved in the festivities. **Rupert** planned the Memorial Service at the cemetery, trimmed the trees, planted flowers, and hired a woman to keep them watered. **Gaspe** and **Wakeham** branches each sponsored a school bus driver for a St. John Ambulance course.

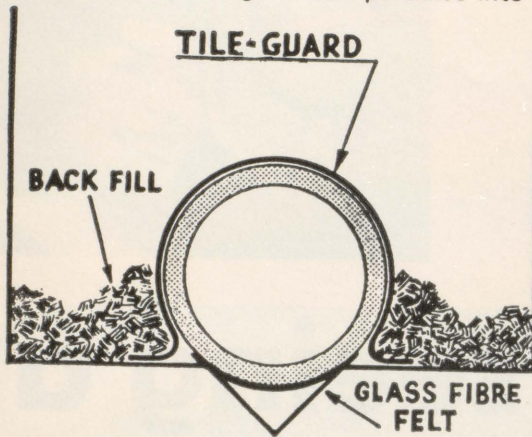
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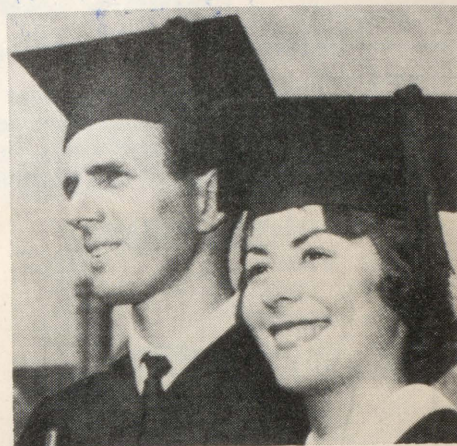
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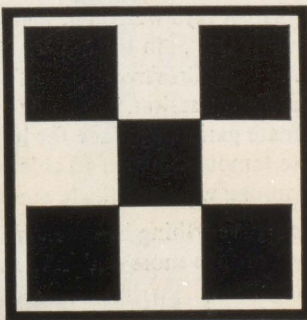
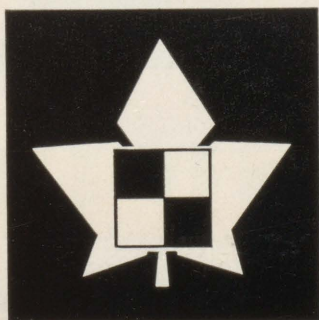


We'll be seeing a lot more of each other.

No matter what area of agriculture you specialize in, no doubt you are already well acquainted with us. Our company and its familiar red and white Checkerboard trademark have been closely associated with Canadian agriculture for over 45 years. And that association is still growing as we continue to expand and improve our products and services in response to the growing needs of modern agriculture.

The challenge that faces agriculture today has never been greater. The need to keep pace with a growing world population becomes more imminent every day. New products, new methods, new research, new efficiency are needed as never before, and the Canadian Agrologist is looked to to provide many of the answers.

We're in this battle together. So keep us in mind when you are looking for a challenging career. We need **You!**



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